

## ABSTRAK

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Perkembangan teknologi sekarang semakin maju salah satu teknologi yang sedang berkembang adalah *cloud computing*. Di dalam layanan *cloud computing* membutuhkan sebuah *infrastruktur* yang besar seperti RAM, Processor, dan Hardisk. Untuk mengatasi masalah tersebut layanan *cloud computing* menyediakan layanan *Infrastructure as a Service*, keuntungan dalam membangun IaaS tersebut bisa mengurangi *resource server* seperti RAM, hardisk, dan processor. Salah satu aplikasi yang menyediakan *Infrastructure as a Service* adalah Openstack. Openstack merupakan perangkat lunak berbasis *open source*. Di dalam IaaS untuk pengelompokan beberapa server atau perangkat maka di butuhkan sebuah *cluster*. *Cluster* pada layanan IaaS untuk pengelompokannya terdiri dari *controller* dan *node*. *Cluster* memiliki beberapa jenis, salah satunya yaitu *cluster high availability*. *High availability* berfungsi untuk menjaga bila terjadi data loss di salah satu *node* maka data secara otomatis terbackup.

Kata Kunci: Cloud computing, Infrastructure as a Service, Openstack, Cluster high availability.

## ABSTRACT

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*Technological development increasingly advanced now one of the developing technologies is cloud computing. In cloud computing service needed a infrastructure such as the RAM, processor, and harddisk. To overcome these problems cloud computing services providing Infrastructure as a Service, the advantage in laas building that can reduce server resources such as RAM, hard disk and processor. One of application which provide infrastructure as a service is openstack. Open Stack is based on open source software. In the laaS for grouping several servers or devices then in need of a cluster. Cluster on laaS service for grouping consists of a controller and nodes. Cluster has several types, one of which is a high availability cluster. High availability in the event serves to keep data loss on one node the data automatically backup.*

*Keywords: Cloud computing, Infrastructure as a Service, Openstack, Cluster high availability.*